

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An infusion device for medical use, comprising:
at least one container designed to hold a specified quantity of a liquid to be infused into a patient;

a weighing device associated for operation with said container to measure the weight of the container and emit a corresponding control signal;

a transport line connected to said container to convey the liquid, in operating conditions, towards an infusion point;

means for moving a flow of the liquid along said line;

a rigid support holding opposite ends of a first length of tubing of said line designed to interact with said movement means, said first length of tubing having a curved shape and a predetermined axial extension;

a control unit associated with said weighing device and with said movement means, the control unit receiving said control signal and being capable of detecting at least one end of infusion condition, said control unit being configured to perform an appropriate end of infusion procedure when an end of infusion condition is detected;

a continuous fluid separator capable of separating the fluid into a gaseous portion and a liquid portion, said separator operating in said transport line between said movement means and said infusion point, said separator comprising a containing body, said rigid support comprising a first portion forming said containing body, said containing body having:

at least one inlet for receiving a fluid from said container;

at least a first outlet for receiving a liquid portion of said fluid, said containing body internally defining a fluid passage between said inlet and said first outlet;

at least a second outlet for receiving a gaseous portion of said fluid; and

selector means interposed between said inlet and said first outlet and capable of continuously separating said fluid into a gaseous portion and a liquid portion, said selector means comprising at least one hydrophilic membrane having one side facing said first outlet and one side facing said inlet, for receiving said fluid and transferring only liquid towards said first outlet, said selector means further comprising at least one hydrophobic membrane having one side facing said second outlet and one side facing said inlet, for receiving said fluid and transferring only gas towards said second outlet, said hydrophobic membrane being situated, in a use configuration of said first length of tubing, in an upper zone of an upstream portion of said fluid passage, said upstream portion being located upstream of said hydrophilic membrane;

at least one check valve predisposed on said transport line to prevent a flow which is inverse to an infusion direction, said check valve being arranged internally of said containing body in a zone comprised between said selector means and said first outlet.

2-6. (Canceled.)

7. (Previously Presented) The device of claim 1, wherein said separator is positioned immediately downstream of said movement means.

8. (Canceled.)

9. (Currently Amended) The device of claim ~~8~~ 1, wherein said line comprises a second length of tubing extending between said container and said rigid support and put into fluid communication with said first length.

10. (Canceled.)

11. (Currently Amended) The device of claim ~~10~~ 1, wherein said rigid support comprises a second lateral portion with a tubular profile to which are fixed corresponding ends of said first and said second length of tubing of said line, said second lateral portion being distanced from said first portion.

12. (Currently Amended) The device of claim ~~3~~ 1, wherein said containing body comprises a base and a cover portion, interacting with each other to form a passage for fluid between said inlet and said first and second outlets.

13. (Previously Presented) The device of claim 12, wherein said base forms a through channel for putting said passage into fluid communication with the exterior, a hydrophobic membrane operating in said channel.

14. (Previously Presented) The device of claim 12, wherein said base comprises an incorporated first tubular connecting element.

15. (Previously Presented) The device of claim 14, wherein said cover portion comprises an incorporated second tubular connecting element having an axis of extension which is inclined with respect to an axis of extension of said first tubular connecting element.

16. (Previously Presented) The device of claim 12, wherein said hydrophilic membrane is interpositioned between said base and said cover portion, and extends throughout said containing body.

17. (Previously Presented) The device of claim 12, wherein each of said base and said cover portion comprises a corresponding base wall and a corresponding perimeter edge emerging from said base wall, a hydrophilic membrane extending parallel to said base wall and distanced there-from.

18. (Previously Presented) The device of claim 17, wherein said containing body has a plurality of projections emerging from said base wall of said base.

19. (Previously Presented) The device of claim 17, wherein said containing body has a plurality of projections emerging from said base wall of said cover portion.

20. (Previously Presented) The device of claim 18, wherein said base projections comprise teeth distributed uniformly over the surface of said base wall of said base.

21. (Previously Presented) The device of claim 19, wherein said cover portion projections comprise deflectors spaced angularly to guide a flow of liquid towards said first outlet.

22. (Previously Presented) The device of claim 11, wherein said first and second lateral portions are rigidly connected by a rigid cross-piece.

23. (Previously Presented) The device of claim 22, wherein said base of said containing body, said rigid cross-piece and said second lateral portion are made in a single piece.

24. (Previously Presented) The device of claim 22, wherein said rigid cross-piece is essentially flat and parallel to a lie plane of said first length of tubing.

25. (Canceled.)

26. (Currently Amended) The device of claim 25 1, wherein said end of infusion procedure comprises a stage of commanding said movement means to stop transport of said fluid along said line.

27. (Currently Amended) The device of claim 25 1, wherein said end of infusion procedure comprises a stage of signalling that the end of infusion condition has been reached.

28. (Previously Presented) The device of claim 1, comprising a plurality of said containers, said transport line exhibiting a plurality of branches for fluid connection of each container to said infusion point, and a corresponding flow shut-off element acting on each of said branches.

29. (Currently Amended) The device of claim 28, wherein said control unit is capable of performing an appropriate end of infusion procedure when the end of infusion condition is detected, said end of infusion procedure comprising a stage of commanding an opening of a shut-off element associated with a container which is not empty.

30-32. (Canceled.)

33. (Currently Amended) The device of claim ~~30~~ 1, wherein said check valve is an integral part of a said rigid support ~~holding opposite ends of a first length of tubing of said line designed to interact with said moving means.~~

34. (Canceled.)

35. (Currently Amended) The device of claim ~~30~~ 1, wherein said check valve comprises a mobile obturator organ, which operates on a passage mouth of said liquid portion.

36. (Previously Presented) The device of claim 35, wherein said passage mouth is associated with a cover portion of said containing body.

37. (Previously Presented) The device of claim 36, wherein said cover portion comprises a base wall and wherein said selector means comprises at least one hydrophilic membrane facing and distanced from said base wall, said passage mouth being associated to said base wall.

38. (Currently Amended) The device of claim ~~5~~ 1, wherein said ~~containing~~ body internally defines a fluid passage between said separator inlet and said first outlet, ~~said hydrophobic membrane being situated in an upper zone of a fluid passage portion located upstream of said hydrophilic membrane, said hydrophobic membrane facing~~ faces upwards in a use configuration of said support element.

39. (Currently Amended) The device of claim ~~38~~ 1, wherein said upstream passage portion for fluid passage has at least one passage section which progressively increases in a direction towards said hydrophobic membrane.

40. (Currently Amended) The device of claim ~~39~~ 1, wherein said hydrophobic membrane is located superiorly with respect to an upper point of the operative surface of said hydrophilic membrane.

41. (Currently Amended) The device of claim 11, wherein said containing body has a development which is prevalently in a transversal direction proceeding from said first ~~lateral~~ portion to said second ~~lateral~~ portion, said first outlet being located in a lateral end zone of said transversal development, in proximity of said second ~~lateral~~ portion.

42. (Previously Presented) The device of claim 41, wherein said second outlet is arranged in an intermediate zone of said transversal development.

43-49. (Canceled.)

50. (Currently Amended) An apparatus for extracorporeal blood treatment comprising an extracorporeal blood circuit, a blood treatment unit positioned in said extracorporeal blood circuit, and a device according to claim 1, ~~an extracorporeal circuit and a blood treatment unit positioned in said circuit, said second connecting element being directly and removably~~ said device being connected to a connector of said extracorporeal blood circuit upstream or downstream of said blood treatment unit .